

IN THE CLAIMS:

1-43. (canceled)

44. (new) A medical implant apparatus, comprising:

a receiver member having a longitudinal axis and defining an upper opening portion and a lower opening portion, a channel transverse to and communicating with said upper opening portion, and an interior groove in said member substantially perpendicular to said axis;

a retaining member having an inner dimension and an outer dimension, said retaining member occupying said groove; and

a longitudinal member at least partially within said channel.

45. (new) The apparatus of claim 44, wherein said groove communicates with said lower opening portion of said member.

46. (new) The apparatus of claim 44, wherein said retaining member is a substantially circular ring member.

47. (new) The apparatus of claim 44, wherein said retaining member is a substantially planar member.

48. (new) The apparatus of claim 46, wherein said ring member includes a gap whereby said ring member can be contracted.

49. (new) The apparatus of claim 44, wherein when said retaining member is within said groove, said retaining member is substantially immovable in a radial direction.

50. (new) The apparatus of claim 44, further comprising a bone anchor having a head within said receiver member, said head having a diameter larger than said inner dimension of said retaining member.

51. (new) The apparatus of claim 50, wherein said head of said bone anchor is substantially between said retaining member and said upper opening portion.

52. (new) The apparatus of claim 50, wherein said retaining member substantially surrounds a part of said bone anchor.

53. (new) An apparatus for receiving and holding components of a multi-axial bone anchor system, comprising:

a receiver member defining an upper opening portion and a lower opening portion, a channel transverse to and communicating with said upper opening portion and said lower opening portion, and a groove around at least a portion of said lower opening portion; and
a bone anchor member having a head at least partially within said lower opening portion.

54. (new) The apparatus of claim 53, wherein said receiver member includes at least two branches defining said channel, said branches being internally threaded with reverse-angle threads.

55. (new) The apparatus of claim 53, further comprising a longitudinal member at least partially within said channel.

56. (new) The apparatus of claim 53, further comprising a closure member at least partially within said upper opening portion.

57. (new) The apparatus of claim 56, wherein said closure member includes a set screw.

58. (new) The apparatus of claim 57, wherein said receiver member includes internal reverse-angle threads, and said set screw includes external threads capable of threadable mating with said reverse-angle threads.

59. (new) A method, comprising:

providing a receiver member defining an upper opening portion and a lower opening portion, a channel transverse to and communicating with said upper opening portion and said lower opening portion, and a groove around at least a portion of said lower opening portion;

providing a retaining member having an inner dimension and an outer dimension;

providing a bone anchor member having a head at least partially within said lower opening portion;

inserting said head of said bone anchor member into said lower opening so that a portion of said head is substantially above said groove; and

inserting said retaining member into said lower opening so that at least a portion of said retaining member is within said groove.

60. (new) The method of claim 59, further comprising positioning said retaining member around a portion of said bone anchor member.

61. (new) The method of claim 60, wherein said positioning step is performed prior to both of said inserting steps.

62. (new) The method of claim 60, further comprising providing a crown member and inserting said crown member in said receiver member.